

**In the Claims:**

1. (Currently Amended) Method ~~A method~~ for generating assignment information for assigning signal-path identifiers of signal paths of at least two different digitally stored circuit descriptions ~~(4, 5)~~ in accordance with a ~~second-first~~ description format for describing digital circuits, wherein the at least two circuit descriptions ~~(4, 5)~~ are each generated by converting a circuit description ~~(4)~~ in accordance with a ~~first-second~~ description format, and the circuit description ~~(4)~~ in accordance with the ~~first-second~~ description format has a higher information content in regard to the signal-path identifiers than the circuit descriptions ~~(4, 5)~~ in accordance with the ~~second-first~~ description format, ~~characterized in that and wherein~~ the assignment information is generated as a function of the at least two circuit descriptions ~~(4, 5)~~ in accordance with the ~~second-first~~ description format and as a function of at least a part of the circuit description ~~(4)~~ in accordance with the ~~first-second~~ description format.

2. (Currently Amended) Method ~~The method~~ according to Claim 1, ~~characterized in that~~ wherein the ~~first-second~~ description format is a description at the ~~a~~ register-transfer level.

3. (Currently Amended) Method ~~The method~~ according to ~~either of the preceding claims, characterized in that the second~~ Claim 1, wherein the ~~first~~ description format is a network-list format.

4. (Currently Amended) Method ~~The method~~ according to ~~any one of the preceding claims, characterized in that~~ Claim 1, wherein the assignment information is generated as a function of signal-path identifiers that identify a plurality of interrelated signal paths.

5. (Currently Amended) Method ~~The method~~ according to Claim 1, wherein the first ~~any one of the preceding claims, characterized in that the second~~ description format stores digital circuits at a lower abstraction level than the ~~first-second~~ description format.

6. (Currently Amended) ~~Method~~The method according to Claim 1, ~~wherein any one of the preceding claims, characterized in that~~ the assignment information is digitally stored.

7. (Currently Amended) ~~Device~~A device for generating assignment information for assigning signal-path identifiers of signal paths of at least two digitally stored circuit descriptions-(4, 5) in accordance with a ~~second~~first description format for describing digital circuits, wherein the at least two circuit descriptions-(4, 5) are each generated by converting a circuit description-(1) in accordance with a ~~first~~second description format, and the circuit description (1) in accordance with the ~~first~~second description format comprises a higher information content in regard to the signal-path identifiers than the circuit descriptions-(4, 5) in accordance with the ~~second~~first description format, ~~characterized in that wherein~~ the device has means for reading the digitally stored circuit descriptions-(4, 5) in accordance with the ~~second~~first description format and for reading the circuit description-(1) in accordance with the ~~first~~second description format and data processing means, ~~and~~ wherein the data processing means are designed in such a way that they generate the assignment information as a function of the at least two circuit descriptions-(4, 5) in accordance with the ~~second~~first description format and at least a part of the circuit description-(1) in accordance with the ~~first~~second description format.

8. (Currently Amended) ~~Device~~The device according to Claim 7, ~~characterized in that where~~ the device is designed to perform a method ~~according to any one of Claims 1 to 6. wherein at least one of:~~

- the first description format is a network-list format;
- the assignment information is generated as a function of signal-path identifiers that identify a plurality of interrelated signal paths;
- the first description format stores digital circuits at a lower abstraction level than the second description format; and
- the assignment information is digitally stored.

9. (Currently Amended) ~~Digital~~A digital storage medium having electronically readable control signals that are designed in such a way that

they can interact with a programmable data processing device in such a way that the data processing device executes a method according to ~~any one of~~ Claims 1 to 6.

10. (Currently Amended) ~~Computer~~A computer-program product comprising a program code, stored on a machine-readable medium, for performing a method according to ~~any one of~~ Claims 1 to 6 if the program runs on a computer or is used in ~~it~~the computer.

11. (Currently Amended) ~~Method~~A method for generating a digitally stored circuit description ~~(4, 5)~~ in accordance with a ~~second~~first description format of a digital circuit from a circuit description ~~(1)~~ in accordance with a ~~first~~second description format of the digital circuit, wherein the circuit description ~~(4, 5)~~ in accordance with the ~~second~~first description format stores the digital circuit at a lower abstraction level than the circuit description ~~(1)~~ in accordance with the ~~first~~second description format, and the circuit descriptions ~~(1, 4, 5)~~ in accordance with the two description formats each comprise signal-path identifiers of signal paths of the digital circuit, ~~characterized in that and wherein~~ the circuit description ~~(4, 5)~~ in accordance with the ~~second~~first description format is generated in such a way that the circuit description in accordance with the first description format ~~it~~ has just as high an information content in regard to the signal-path identifiers as the circuit description ~~(1)~~ in accordance with the ~~first~~second description format.

12. (Currently Amended) ~~Method~~The method according to Claim 11, ~~characterized in that~~wherein the circuit description ~~(4, 5)~~ in accordance with the ~~second~~first description format is generated in such a way that the circuit description in accordance with the first description format ~~it~~ contains information about changes in the signal-path identifiers of the circuit description ~~(1)~~ in accordance with the ~~first~~second description format as compared to the signal-path identifiers of the generated circuit description ~~(4, 5)~~ in accordance with the ~~second~~first description format.

13. (Currently Amended) ~~Method~~The method according to Claim 11 or 12, ~~characterized in that~~wherein the circuit description ~~(4, 5)~~ in accordance

with the ~~second~~first description format is generated in such a way that the circuit description in accordance with the first description format ~~it~~ comprises signal-path group identifiers that indicate which signal paths in the circuit description-(1) in accordance with the ~~first~~second description format are provided with signal-path identifiers forming a group.

14. (Currently Amended) ~~Method~~The method according to Claim 13, ~~characterized in that~~wherein the signal-path group identifiers in the circuit description-(4, 5) in accordance with the ~~second~~first description format are a reference to the signal-path identifiers in the circuit description-(4, 5) in accordance with the ~~second~~first description format whose assigned signal paths in the circuit description-(1) in accordance with the ~~first~~second description format have as a group a common signal-path identifier.

15. (Currently Amended) ~~Device~~A device for generating a digitally stored circuit description-(4, 5) of a digital circuit in accordance with a first description format from a circuit description-(1) in accordance with a first description format of the digital circuit, wherein the circuit description-(4, 5) in accordance with the second description format stores the digital circuit in a lower abstraction level than the circuit description-(1) in accordance with the first description format, and the circuit descriptions-(1, 4, 5) in accordance with the two description formats each comprise signal-path identifiers of signal paths of the digital circuit, ~~characterized in that~~wherein the device has means for reading the digitally stored circuit description-(1) in accordance with the first description format, means for writing the circuit description-(4, 5) in accordance with the second description format and data processing means, and wherein the data processing means are designed in such a way that they the data processing means generate the circuit description -(4, 5) in accordance with the second description format that has just as high an information content in regard to the signal-path identifiers as the circuit description-(1) in accordance with the first description format.

16. (Currently Amended) ~~Device~~The device according to Claim 15, ~~characterized in that~~wherein the device is designed to perform a method ~~according to any one of Claims 11 to 14~~ in which at least one of:

the circuit description in accordance with the second description format is generated in such a way that the circuit description in accordance with the second description format contains information about changes in the signal-path identifiers of the circuit description in accordance with the first description format as compared to the signal-path identifiers of the generated circuit description in accordance with the second description format;

the circuit description in accordance with the second description format is generated in such a way that the circuit description in accordance with the second description format comprises signal-path group identifiers that indicate which signal paths in the circuit description in accordance with the first description format are provided with signal-path identifiers forming a group; and

the signal-path group identifiers in the circuit description in accordance with the second description format are a reference to the signal-path identifiers in the circuit description in accordance with the second description format whose assigned signal paths in the circuit description in accordance with the first description format have as a group a common signal-path identifier.

17. (Currently Amended) ~~Digital~~A digital storage medium comprising electronically readable control signals that are designed in such a way that ~~they~~the control signals can interact with a programmable data processing device in such a way that the data processing device executes a method according to any one of Claims 11 to 14.

18. (Currently Amended) ~~Computer~~A computer-program product comprising a program code, stored on a machine-readable medium, for performing a method according to ~~any one of Claims 11 to 14~~ if the program runs on a computer or is used in ~~the~~the computer.